REMARKS

Claim 7 has been canceled without prejudice or disclaimer.

Claims 1 and 6 have been amended.

Applicants have added new claims 31-36.

Substantive remarks are as follows:

Claims 1-10 and 13-30 are allowable

Regarding the rejection of claims 1-10 and 13-30 under 35 U.S.C. § 103(a) over RFC 2516 in view of Iwakata (US Pub. 2002/0095299) on page 2 of the Office Action, claims 1 and 6 have been amended to overcome these rejections. Claim 1 has been amended to include the element "generating a device identifier code that specifically identifies a product model of a customer premises equipment device in response to receiving a point-to-point over Ethernet (PPPoE) packet communicated over the distributed network." Claim 1 as amended further recites the element "broadcasting a point-to-point over Ethernet (PPPoE) active discovery initiation (PADI) packet, wherein the PPPoE active discovery initiation (PADI) packet includes a tag, wherein the tag is based on the device identifier code." These elements are not taught or suggested by RFC 2516 or Iwakata. Furthermore, these elements are not taught or suggested by a combination of the two references.

RFC 2516 discloses a standard method for transporting multiprotocol datagrams over point-to-point links. At page 2 of the Office Action, it is stated that "RFC 2516 teaches generating a device identifier code in response to receiving a point-to-point over Ethernet (PPPoE) packet communicated over the distributed network." The Office Action further states that the "device identifier code" disclosed in RFC 2516 is the "Ethernet MAC address of the source device." Claim 1, as amended, recites that the device identifier "specifically identifies a product model of a customer premises equipment device." The Ethernet MAC address cited by the Office Action does not specifically identify a product model of a customer premises equipment device. Furthermore, as stated in the Office Action at p. 3, RFCA 2516 does not

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disclose a tag included in a PADI packet, wherein the tag is based on the device identifier code. Accordingly, RFC 2516 does not teach or suggest each and every element of claim 1.

Iwakata discloses a customer information control system for controlling personal information and product identification information for electronic equipment belonging to a customer. The system disclosed by Iwakata includes a client machine belonging to a customer and a host machine that registers customer information. Iwakata [0070]. The client machine includes a product identification information storing unit and a data transmit/receive unit for sending customer management information to the host machine. Iwakata [0071]. Product identification information is transmitted to the host machine after the host machine or client machine has initiated a communication session. Iwakata [0083]. There is no teaching or suggestion by Iwakata that the client machine generates a device identifier code that specifically identifies a product model of a customer premises equipment device in response to receiving a point-to-point over Ethernet (PPPoE) packet communicated over the distributed network. Iwakata nowhere teaches or suggests the use of Ethernet or PPoE packets for communication between the host and client machines.

Furthermore, Iwakata does not teach or disclose "broadcasting a point-to-point over Ethernet (PPPoE) active discovery initiation (PADI) packet, wherein the PPPoE active discovery initiation (PADI) packet includes a tag, wherein the tag is based on the device identifier code" as recited in claim 1. As noted above, Iwakata does not teach or suggest the use of Ethernet or PPoE packets for communication between the host and client machines. In addition, Iwakata does not disclose embedding product information in an Ethernet packet tag. Instead, Iwakata discloses that "personal information is combined with the read out product information as a set of customer management information CMI which is sent to the host machine." Iwakata [0087]. Nowhere does Iwakata teach or suggest placing this information into a PADI packet including a tag.

Accordingly, Iwakata does not teach or disclose at least two elements of claim 1. Furthermore, as explained above, these elements are not taught or disclosed by RFC 2516. Accordingly, the combination of these two references does not teach or suggest each and every limitation of claim 1.

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With respect to claims 2-5, Iwakata and RFC 2516 fail to teach or suggest each and every element of these claims, at least by virtue of their dependency from claim 1.

With regards to claim 6, the claim, as amended, recites the following element: "generating a device identifier code based on the tag in response to receiving the PPPoE active discovery packet." Furthermore, claim 6 recites that the tag upon which the device identifier code is based "specifically identifies a product model of a customer premises equipment (CPE) device." As discussed above with respect to claim 1, neither RFC 2516 nor Iwakata teach or suggest a device identifier code that specifically identifies a product model of a customer premises equipment device.

Furthermore, neither RFC 2516 nor Iwakata teach or suggest "sending a point-to-point over Ethernet (PPPoE) active discovery packet, wherein the PPPoE active discovery packet includes a tag that specifically identifies a product model of a customer premises equipment (CPE) device" as recited in claim 6. As stated in the Office Action at p. 4, RFC 2516 fails to specify this element. Furthermore, Iwakata fails to teach or suggest the use of PPPoE active discovery packets including a tag that specifically identifies a product model of a CPE device. As described previously, Iwakata instead discloses combining personal information with product identification information into customer management information CMI and sending this combined information. Accordingly, RFC 2516 and Iwakata, alone or in combination, fail to teach or suggest each and every element of claim 6.

With respect to claims 7-10 and 13-15, claim 7 has been cancelled without prejudice or disclaimer. Claims 8-10 and 13-15 depend from claim 6. Therefore, RCF 2516 and Iwakata do not teach or suggest every element of claims 8-10 and 13-15, at least by virtue of their dependency on claim 6.

In regards to claim 16, the claim includes the following element: "receiving a point-to-point over Ethernet (PPPoE) active discovery packet, wherein the PPPoE active discovery packet includes a tag that identifies a product model of a customer premises equipment device." As described above, neither RFC 2516 nor Iwakata teach or suggest a tag that identifies a product model of a CPE device included in a PPPoE active discovery packet. Accordingly, RFC 2516 and Iwakata fail to teach or suggest every element of claim 16, and claim 16 is also allowable.

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Claims 17-20 depend from claim 16. Iwakata and RFC 2516 fail to teach or suggest each and every element of these claims, at least by virtue of their dependency from claim 16.

With respect to claim 21, the claim recites "a module coupled to the network interface, said module configured to transmit a point-to-point over Ethernet (PPPoE) active discovery packet including a tag, the tag comprising a device identifier field that uniquely identifies a CPE product model." As explained above, neither RFC 2516 nor Iwakata teach or suggest a tag that comprises a device identifier field that uniquely identifies a CPE product model. Furthermore, neither RFC 2516 nor Iwakata teach or suggest a module configured to transmit a PPPoE active discovery packet including such a tag. Therefore, RFC 2516 and Iwakata fail to teach or suggest each and every limitation of claim 21.

Claims 22 and 23 depend from claim 21. Iwakata and RFC 2516 fail to teach or suggest each and every element of these claims, at least by virtue of their dependency from claim 21.

Claim 24 recites "an access concentrator configured to receive an active discovery packet having a tag comprising a device identifier field." The claim further recites that the "device identifier field uniquely identifies a product model associated with the communications device." As set forth above, RFC 2516 and Iwakata each fail to teach or suggest the use of a tag in a discovery packet that uniquely identifies a product model associated with a communications device. Moreover, both RFC 2516 and Iwakata fail to teach or suggest an access concentrator configured to receive an active discovery packet having such a tag. Accordingly, RFC 2516 and Iwakata fail to teach or suggest each and every limitation of claim 24.

Claims 25 and 26 depend from claim 24. Iwakata and RFC 2516 fail to teach or suggest each and every element of these claims, at least by virtue of their dependency from claim 24.

With respect to claim 27, the claim recites the following element "an Ethertype payload field including a host-uniq tag value indicating a model type of a digital switching device." As explained above, neither RFC 2516 nor Iwakata teach or suggest a tag value indicating a model type of a digital switching device. Furthermore, neither RFC2516 nor Iwakata teach or suggest an Ethertype payload field including such a tag. Accordingly, RFC 2516 and Iwakata fail to teach or suggest each and every limitation of claim 27.

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Claims 28-30 depend from claim 27. Iwakata and RFC 2516 fail to teach or suggest each and every element of these claims, at least by virtue of their dependency from claim 27. Furthermore, claim 30 recites that "the model type of the digital switching device is a nine bit binary device identifier code associated with customer premises equipment." Neither RFC 2516 nor Iwakata teach or suggest the use of a nine bit binary device identifier code associated with customer premises equipment. Accordingly, RFC 2516 and Iwakata fail to teach or suggest each and every limitation of claim 30.

Furthermore, with respect to each of the claims discussed above, there is no suggestion in either RFC 2516 or Iwakata to combine the two references. RFC 2516 "provides a standard method for transporting multi-protocol datagrams over point-to-point links." RFC 2516, p.1. Iwakata, in contrast, is concerned with a customer information control system of electronic equipment for controlling personal information and product identifications information of the electronic equipment belonging to a customer. Iwakata, p. 1. Furthermore, the system of Iwakata discloses a simple host to client direct connection. A person of ordinary skill would not look to a multi-protocol datagram standard, such as the point-to-point over Ethernet multi-protocol standard of RFC 2516 to implement a simple data connection between a host and client. As such, Iwakata does not address and its teachings of a single host-client connection are inconsistent with transporting multi-protocol datagrams over point-to-point links. Accordingly, there is no motivation, teaching or suggestion for one of skill in the art to combine the RFC 2516 and Iwakata references.

For at least the reasons set forth above, it is respectfully submitted that the obviousness rejection of claims 1-10 and 13-30 is improper and withdrawal of this rejection therefore is respectfully requested.

Claims 11 and 12 are allowable

Regarding the rejection of claims 11-12 under 35 U.S.C. § 103(a) over RFC 2516 in view of Iwakata as applied to claim 6 above, and further in view of Yusko et al. (US Pub 2004/0071133) on page 11 of the Office Action, claim 6, from which claims 11 and 12 depend, has been amended to overcome these rejections.

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Yusko discloses a system for intelligent PPPoE initialization. Yusko, p.1. Yusko fails to teach or suggest sending a point-to-point over Ethernet (PPPoE) active discovery packet, wherein the PPPoE active discovery packet includes a tag that specifically identifies a product model of a customer premises equipment (CPE) device, as recited by claim 6. Furthermore, Yusko fails to teach or suggest generating a device identifier code based on the tag in response to receiving the PPPoE active discovery packet, as recited by claim 6. As explained above, these elements are also not taught or disclosed by Iwakata or RFC 2516. Accordingly, even if there were a suggestion to combine the Yusko, Iwakata, and RFC 2516 references, the references in combination fail to disclose each and every element of claims 11 and 12, at least by virtue of their dependence on claim 6.

Furthermore, there is no suggestion in the Yusko and Iwakata references that the references should be combined. Yusko discloses a system for intelligent PPPoE initialization. Iwakata is concerned with a customer information control system of electronic equipment for controlling personal information and product identifications information of the electronic equipment belonging to a customer. Iwakata, p. 1. Accordingly, each of the cited references addresses a different subject and a different problem. Thus there is no motivation, teaching or suggestion for one of skill in the art to combine the references.

For at least the reasons set forth above, it is respectfully submitted that the obviousness rejection of claims 11 and 12 is improper and withdrawal of this rejection therefore is respectfully requested.

Claims 31 to 35 are allowable

Claims 31 to 35 have been added. Applicants submit that these claims are not taught or suggested by the prior art and are allowable.

Applicants respectfully submit that the amendment of July 13, 2005 is now compliant. Applicants respectfully submit that the present application is now in condition for allowance. Accordingly, the Examiner is requested to issue a Notice of Allowance for all pending claims. If, for any reason, the Office is unable to allow the Application on the next Office Action, and believes a telephone interview would be helpful, the Examiner is respectfully requested to

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34456

contact the undersigned attorney or agent. The Commissioner is hereby authorized to charge any fees, which may be required, or credit any overpayment, to Deposit Account Number 50-2469.

Respectfully submitted,

8-11-2005
Date

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EXAMINER	
BLAIR, DOUGLAS B	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

DOCKETED
DATE: 7/19/05
BY: Eke

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Notice of Non-Compliant Amendment (37 CFR 1.121)	Application No. 10/634,116	Applicant(s) JONES ET AL.
	Examiner Douglas B. Blair	Art Unit 2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on 4/25/2005 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other _____.
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other _____.
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other _____.
- ☒ 4. Amendments to the claims:
  - ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☒ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☐ E. Other: _____.

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714 and the USPTO website at http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/officeflyer.pdf .

TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted within the time period set forth in the final Office action.

2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a *Quayle* action.

   Extensions of time are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

   Failure to timely respond to this notice will result in:
   Abandonment of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or
   Non-entry of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

Andrew Caldwell

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER

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